ATTACHMENT 27

UNCERTIFIED-UNEDITED ROUGH DRAFT

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REPORTER: WILLIAM VISCONTI

THE VIDEOGRAPHER: Good morning. We are going on the record at 10:05 on March 17th, 2023. Please note that this deposition is being conducted virtually quality of recording depends on quality of camera and internet connection of participants. What is seen from the witness and heard on screen is what will be recorded. Audio and video recording will continue that place unless all parties agree to off the record.

This is media unit 1 of the video deposition of Einer Elhauge in the Matter of da Vinci Robot Surgical Robot Antitrust Litigation filed in the U.S. District Courty for the Northern District of California San Francisco Division. Case

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My name is Michael Barankovich representing Veritext and I'm the videographer. The court reporter is Bill Visconti from the firm Veritext. I'm not authorized to administer an oath, I'm not related to any party in action nor am I financially interested in the outcome.

All counsel will noted on the stenographic record. Will the court reporter please swear the witness.

E I N E R E L H A U G E,

having been first duly sworn by the Notary Public, was examined and testified as follows:

EXAMINATION CONDUCTED BY MS. BASS:

Q. Good morning, Professor Elhauge. My name is Ashley Bass and I represent Intuitive Surgical in this matter. Can you state you full name for the record?

A. God morning to you as well. My full name is Einer Richard Elhauge.

Q. Will it work today if I refer to you as Professor Elhauge?

really worse or better whether the market perceptions were accurate or not. That was the response that I intended to have. So that that price response alone means that there would have been a price cut in the but for world that would have broadly benefitted Intuitive's customers.

Q. What evidence is in the record that Intuitive thought that the third-party rivals provided EndoWrist that were just as good as new EndoWrists?

A. . I can't off the top of my head say which in the report it is but there is a

quote where they looked at the repaireds and often said it was -- it appeared to be I can't remember exactly what the language was, but it indicated in substance it looking like it was just as good. And for refurbished ones in general they went further and said they were just as good or better.

Q. And that is in reference to potential Intuitive refurbished he EndoWrist, correct?

A. The latter quote, yes. There was another one I noticed reviewing in my reports where they were talking directly about the repaired EndoWrists and concluded in substance they were just as good.

Q. If we come across that in the course of the questioning today, can you point that document out to me when you discuss it in your report?

A. Sure.

Q. Is it relevant to your opinion whether the EndoWrist sold by third-parties are as safe as new EndoWrists?

MR. SNYDER: Objection to the form.

A. I would say for my predictions about what would happen what matters is the market perception, the evidence indicates that the perception of market participants was that they were as safe and there is evidence to support that that indicates if anything they were in fact safer. None of my opinions depends upon my own opinion about whether they are safer or not. I'm not making a medical other engineering opinion about that. I'm

basing my predictions upon market perceptions.

And then to the extent that we get to procompetitive justifications, that's more about the defense expert argument that the perceptions of the participants were wrong. He is saying and in fact he says concludes that the repaired EndoWrists were less safe. On that point I'm simply pointing out that there is a lot of evidence that he ignored that indicates that they were as safe, but ultimately the burden of proof is on the defense on that issue.

So all I do is point out what the evidence is on that, but my opinions are

ultimately rest on that conclusion because even if you thought there was some safety concerns we could rely on the incentives of hospitals to only use a repaired EndoWrist if they thought they were safety justified.

Q. So is it relevant to your opinions whether hospital viewed EndoWrist sold by third-parties is the same as new EndoWrists?

A. Yes, yes. I do cite in reliant

part on evidence from the hospitals that they didn't discern any difference between the repaired EndoWrist and the new EndoWrists. And found them to be as safe.

Q. You cite evidence from certain hospitals; correct?

A. There are a number of hospitals. Also there is statistical evidence some of them relying upon reviewing at least one that I can recall rely on reis view of the numbers. There is also I think statistics themselves on adverse events and there is also evidence that the hospitals asked Intuitive whether they had any evidence that there viable product were less safe and Intuitive was unable to produce

such a document.

Q. Is it relevant to your opinion whether doctors viewed EndoWrists sold by third-parties as the same as Intuitive's EndoWrist?

A. Yes, I rely on evidence that they in fact did.

Q. From certain doctors, correct?

A. Well the doctors that actually

that I used would 20 percent for the mix of new and used EndoWrists and also that as part of the extended use program they lowered the per use price for certain categories of EndoWrists because of competitive pressure was one of the reasons that they cited for why they did that.

Q. Was that competitive pressure that they indicates was from the third-parties?

A. The documents themselves don't explicitly say that, but the timing I think makes it clear that it must have been that and that Dr. Smith's alternative hypothesis that involves competition with laparoscopic surgery doesn't make much sense because laparoscopic surgery had been around for decades before and also was declining over the proceeding years before they introduce the extended use program.

Q. But the documents do explicitly reference laparoscopic surgery, correct?

MR. SNYDER: Objection.

A. It generally talks about competitive pressure was any recollection.

Q. Do you recall what the total sales were of the third-party resettle EndoWrists in

the actual world?

A. Total sales by the rival repairers, I don't have that number memorized off hand, no.

Q. Do you know if more or less than a million dollars?

A. I don't know the number offhand. I guess the percentage I calculated in market share, so it must be in the backup there, but I can't recall.

Q. Is it relevant to your opinion whether hospitals viewed EndoWrist sold by third-parties as being the same as Intuitive's EndoWrists and my question there is we talked about doctors and my I want to talk about hospitals as well?

A. Yes, I think the he had indicate that they did think that they yes just as good. All the evidence seems consistent with that that I saw and we have the revealed preference

the fact that they -- many of them in fact did use third-party repaired EndoWrists repaired even with the restraints on their choices.

Q. You use the term many being do you know how many hospitals used services from the third-party companies?

A. I don't have the number of hospitals offhand. But it would be all the customers of SIS, Restore and Robotix. Over the years when they were it in the market which I think were 2018 to 2021.

Q. Do you recall how many third-party EndoWrists were sold to hospitals during that time period?

A. I don't know that number.

Q. You discuss a little bit today you think the record reflects that the instruments sold by the third-parties were just as good as new instruments. Are you relying on any expert testimony in the case to reach that opinion?

A. So my opinion again to be precise is that the evidence indicates that market participants thought they were just as good. Which is relevant factor my market analysis as

an economist. I also conclude that the evidence was consistent with that view. There is lot of evidence to support it but there is

conflicting testimony by expert witnesses or defense expects take one side and Plaintiffs experts take the other side.

I cite what they say, but the evidence of the Plaintiffs' expert offer and what the defense experts offer I myself do not ultimately resolve that issue, because that is in their field of expertise, not mine. For me it suffices what the market participants thought and that whether you thought they were just as good or not the rest of my opinions would hold, but there is a lot of evidence it seems to me to indicate they were just as good if not better.

Q. You're not relying on any opinion testimony for example for Dr. Parnell on this point; is that correct?

MR. SNYDER: Objection to the form.

A. I do cite Dr. Parnell for various points. To the extent there is conflict between his views and the views of the defense

experts I'm saying that I was relying on Dr. Parnell regarding the defense experts.

they all indicated that the perception was that they were just as good if not better.

Q. Who said if not better?

A. Well, if not better was I think Intuitive itself said about its refurbished EndoWrists and I think also evidence indicated by Dr. Parnell that in fact the repaired EndoWrists were more reliable than new row EndoWrists and that consistent with statistics that indicate there is more adverse events associated with the new EndoWrists and in fact none that I could find associated with the repaired EndoWrists.

Q. So is it your understanding that Dr. Parnell is offering an opinion in this case regarding the relative adverst events between third-party EndoWrists and new EndoWrists?

MR. SNYDER: Objection to the form.

A. I think there are numbers that he cites that I quote in my rebuttal report that would support that conclusion.

Q. Other than Dr. Parnell, is there

anything else that you're using to support the

notion that third-party EndoWrists were better than new EndoWrists?

A. Well, it is hard to remember everything in 400 pages of reports here. But there is statistics that there is less adverse events, there is Dr. Parnell's testimony which -- also just the description of the process that there is huge amount of testing that to make sure that the repaired EndoWrists are working probably and Dr. Parnell pointed out that they don't actually do that kind of test for new EndoWrists before they release it. So with that and there are some -- there are some documents that say they are as good or better.

Q. During the course of today, if you come across think documents as we are look through your report that EndoWrist reset by third-party are better, I would like if you to point that out?

A. Okay.

Q. You said in your prior there was a huge amount of testing that was done on the third-party sold EndoWrists, what is your basis

for that statement?

A. So what I quote in my report I think it is in the section on the safety justifications claimed by the Defendant. By test I should be careful, I'm not saying that Intuitive ever tested whether the third-party devices were safe. In fact remarkably they never tested before they imposed these restraints. I'm saying the third-party companies themselves tested the particular instruments they were working on to make sure everything worked beforehand and also put them through their paces to make sure they worked after all the repairs. And that is describe in some details. I have a couple of very long footnotes and also Dr. Parnell goes through that process in some detail and I cite in the procompetitive justification section of my report exactly where Dr. Parnell goes through that.

Q. Did you review those testing materials that you're referencing?

A. Review the testing materials?

Q. Yes.

A. I'm not sure what you mean by testing materials.

Q. Did you review any tests that were conducted by the third-parties regarding the EndoWrists that they sold?

A. I reviewed their -- the process, the testimony was about a description of the process that they used to test it. So that what I'm talking about, they did all of these tests to make sure that it in fact would work. And it was interesting that Dr. Parnell pointed out that they actually don't do all that testing for new EndoWrists which seems consistent with statistics that actually the new EndoWrist have more adverse events associate with them then the repaired EndoWrists.

Q. Do you consider yourself an expert on assessing the reasonableness of the testing that was conducted by the third-parties to ensure the safety and reliability of their product?

A. No, I'm not an engineering expert. I'm simply responding to Dr. Smith who his

opinion that they were less safe was based on the erroneous assumption they didn't do any such testing to make sure that the products worked well. And so in part of rebutting him I point out there is all of this evidence. But I'm not an engineering expert so I'm not opining on issue of engineering.

Q. Are you aware of who Dr. Howe is?

A. Yes.

Q. Who is Dr. Howe?

A. He is the defense expert in this case.

Q. He is a mechanical engineer, correct?

A. Yes, I believe so.

Q. Did you review his expert report?

A. I did, yes.

Q. Are you aware that he disagrees with Dr. Parnell regarding adequacy of the test that was conducted by, for example, Robotix for its product?

A. Yes, I reviewed that and I discuss it in my rebuttal report. I think Dr. Parnell pointed out that Dr. Howe in fact had he said

Q. You don't consider yourself of FDA

regulations, correct?

A. Correct.

Q. You're not a FDA expert, correct?

A. Yes.

Q. You never worked at FDA?

A. I have not.

Q. You have no specialized expertise in analyzing FDA regulations correct?

A. Credit.

Q. You have no experience applying FDA regulations to medical devices; correct?

A. Well, in my role as a health well policy professor I have examined certain issues regarding FDA regulation of medical devices. But I'm not offering any opinions in this case as a regulatory expert.

Q. Are you offering any opinions in this case as to whether FDA -- sorry -- let me start over.

Are you offering an opinions in this case as to whether FDA clearance was required for the instruments sold by the

third-parties?

MR. SNYDER: Objection to the form.

A. No, I note the conflict an opinion among the experts, Plaintiff expert versus defense expert view whether it is actually required. As I indicated in my report and in my testimony just now I'm relying on the market participants perception about whether it was required which is all that matters for the market effects that I'm opining on.

Q. Are you offering any opinion if FDA clearance was required how long it would have taken companies to accomplish that in the but for world?

A. I'm opining that they could have achieved it earlier in the but for world and would have had incentive to do so. I don't opine on particular dates in which they would have obtained that FDA clearance.

Q. So you're opining that they would have an incentive to seek FDA clearance earlier if FDA clearance was required, is that right?

A. No, I'm staying if there weren't the restraints they would have had incentives

to apply for FDA clearance earlier. They would have entered the market anywhere given the

evidence that market participants were not shy about entering the market without advance FDA clearance, but they would have had incentives to apply for FDA clearance from the get go before EndoWrist repairs.

I guess I'm relying on the fact that the service, I'm relying on the fact that there seems to be a consensus among the regulatory experts for the Plaintiffs and Defendants that no FDA clearance was required to provide the service.

Q. Are you an offering in expert that if FDA clearance was required in the but for world not only would these companies have had the incentive to seek it, that the companies would have received FDA clearance?

A. Yes, I think the evidence indicate the they would have. The one firm to pursue it contained the 510(K) FDA clearance.

Q. You understand that that was clearance for one instrument, correct?

where -- whichever the rival was that was prying to process it, said there was all kinds of crazy testing and crazing questions -- questions that may no sense I think was the lapsing that he used that made him think that

perhaps Intuitive was interfering with the process. So in that deposition maybe there was e-mails that were exhibits to that deposition, but I'm not recalling them offhand.

Q. We will get to that in a minute, that is again about Iconocare. Did you review any correspondence that the FDA September to Robotix regarding the FDA's per seed deficiencies in Robotix's application to the FDA?

A. I don't recall anything that I characterize as about the perceived deficiencies.

Q. Do you understand that Robotix did not achieve clearance on any of its instruments from the FDA; correct?

A. My understanding there hasn't been a decision a that clearance is even required

and it has no adverse decision that had been reached as to any Robotix instrument.

Q. Are you offering an expert opinion as to whether or not Robotix can lawfully sell its products without FDA clearance?

A. No, as I said I'm not opining on

the regulatory expert question. I'm opining on what market participants perceived to be the case and their willingness to enter in advance of receiving a decision on FDA clearance and the likelihood that they would apply earlier for it in the but for world.

Q. One point just to follow up on earlier you said there were many hospitals that were willing to purchase the products sold by the third-parties without FDA clearance and I think we talked about that earlier, do you know the number of hospitals that were willing to purchase?

MR. SNYDER: Objection to the form.

A. I don't recall the number offhand, but I'm sure you could find it from the back up. Whoever the customers are of these third-party repair parties.

Q. Do you review testimony from market participants that indicated that they would not be willing to use instruments from third-parties that did not have FDA clearance?

A. There was that testimony that I just heard that they would be. So there was

some testimony that suggested the abstract, they wouldn't want to deal with something that didn't have FDA clearance. But that of course the way the question was asked assumed that FDA clearance was in fact required. Which begs the case of this question about whether or not they would not use a product or service before any decision had been made about whether FDA was required or not.

Q. So radio he view in testimony from hospital that indicate they would not be willing to use EndoWrist from the third-parties unless those entities received FDA clearance?

A. All the stuff that Dr. Smith cite to support that I reviewed and discussed in my rebuttal report report. As I said before I think there was some that sort of abstractly

been able to achieve FDA clearance and to achieve it earlier and that they would have operated in the meantime before obtaining FDA clearance.

Q. So currently only one instrument has received FDA clearance by the third-parties, correct?

A. Correct.

Q. So what is the basis of your opinion that the third-parties would of received FDA clearance on other instruments?

A. I didn't see any evidence to indicate that that there was -- I mean if you could validate your process for one instrument it seemed to me that you could validate your process for other instruments as well. I

didn't see anything to indicate that differences among the instruments would affect the ability to get 510(K) clearance.

Q. I think he we established this earlier you're not an expert on when the FDA grants 510(K) clearance, correct?

A. I am not.

Q. Have you reviewed any information

that would be submitted to FDA with respect to instruments other than the one that that has received 510(K) clearance?

A. I haven't, I'm just relying on the general testimony and evidence from the parties that they were willing to apply for all of it and I didn't see any signs that they -- there was a thought there was going to be a difference.

Q. Robotix applied for FDA clearance but then withdrew its application shall correct?

A. I don't have any recollection of that.

Q. It we were discussing earlier that Robotix had interactions with the FDA, correct?

A. Yes.

Q. Do you think that have the expertise to opine that if one EndoWrist from the third-parties has received clearance from the FDA that necessary the FDA would issue clearances for all other Si and Xi EndoWrists from the third-parties?

Q. No one has -- none of the

third-parties have sold an X/Xi instrument where the usage counter has been reset?

A. I think that is correct, yes.

Q. You understand that the third-parties did sell certain EndoWrists where the usage counter had been reset for S/Si instruments, correct?

MR. SNYDER: Objection to the form, I don't think they sold the instrument, I think they sewed the repairs to the instruments. I don't think they physically tea took possession of the S/Sis and resold them. I think that is what the repair was.

Q. So you you understand that the activities of the third-parties involved modifying the usage counter on S/Si instruments; is that right?

A. That is one of the activities they engaged in, yes.

Q. Do you consider yourself to be an expert on the technical and the of the third-parties to develop a process to modify

the usage counter for X/Xi instruments?

A. I'm not a technical expert. I

side evidence to indicate they thought they could and had in fact say they have developed a method for doing so even though it is not commercially available yet. So I think that's all evidence -- at in the end all I say enough evidence to make it a reasonable scenario to check for damages and I leave resolution of that issue to the factfinder yes.

Q. You're not an expert on the encryption of the X/Xi devices correct?

A. I myself am not an expert on that topic. I'm relying on evidence from the parties that indicate that they thought that they could and in fact overcome the issue and I believe there is also an engineering expert who I believe his name is Humphrey who gave testimony that it is just a matter of time it could have been done any time in the last five years if I recall correctly.

Q. Are you relying on Mr. Humphrey for your opinions regard whether X/Xi reset instruments would have been available in the

but for world?

A. I'm relying on him for the notion

that there is sufficient evidence they could have done so in the but for world to make it reasonable to calculate damages based on that scenario. As he said in paragraph 417 I say that but I also make clear clear that aim moot offering a PowerPoint that rivals definitely would have developed an ability to repair X/Xi EndoWrist models in the but for world. So I model both the scenario where they would have been able and where they won have been able to. I merely include Mr. Hum free's analysis among many other pieces of evidence that suggests that they would have been able to do so. But I leave ultimately the fact actual us resolution to that and believe Mr. Humphrey testimony to the factfinder.

Q. Mr. Humphrey is not an expert in this case; correct?

A. No, he is an expert in the SIS case.

Q. You reviewed Mr. Humphrey's expert

testified maybe third, fourth quarter of 2023, do you recall that testimony?

A. I do not.

Q. What is your opinion as to why that date would have been earlier in the but for world if they even made that date?

A. Because they would have invested more in developing the ability to do so if they didn't have the restraints. They entered with the easiest one, the S/Si repairs. And they were totally driven out of the market. Intuitive's enforcement of its restraints was extremely successful and worked with every single hospital. So it would have been futile to spend a lot of money to develop this in a world with restraints. But without the restraints there is lot of money to be made, hundreds of millions of dollars according to estimates of some of the IRCs. So there would have been a lot more incentive to invest earlier to develop this technology.

Q. How much money do they need to develop the technology?

A. I don't know exactly how much they need to develop it. But one of them I guess already has developed it.

Q. If Restore needs more money to develop the technology, what are they going to use the money for?

A. What are they going to use the mop

for?

Q. Yes.

A. To develop the technology. I'm not sure that I understand the question.

Q. My question to you is what is your understanding of what they need to do in order to develop the technology are what will they use the money for?

A. I'm not a technical expert. What technically they need to do. Just that Robotix was able to do it so it is not a insuperable task. And that they express great confidence that they would be able to do so. As say the only rethey haven't don't so for because it is futile until they get some relief from the Intuitive blocks.

Q. So your testimony the only reason

that resort hasn't developed X/Xi reset process so far is because it is futile?

A. I think there is evidence to indicate that's the case of the that that they would have in the but for world. Again as I explicit here many times and paragraph 417, I'm not offering an opinion that they definitely

would have done so. I'm leaving resolution of that dispute to the factfinder I simply say there is all of this evidence to indicate they could have. Makes are that makes a reasonable to calculate damage under consider scenario where they would have.

Q. Did you speak to anyone at Restore to know what the status was of their ability to develop a process to reset X/Xi EndoWrist?

A. I have not.

Q. Do you know if they are actively work on attempt to develop a process to reset X/Xi instruments?

A. I do not.

Q. And X/Xi instruments entered the marketplace in 2014, correct?

2017?

A. Well for Restore as paragraph 409 A notes they testified that the business was delayed because they were counting on revenue to grow their business. So you have direct testimony from them that the challenged restraints delayed their entry and I also cite to paragraph 163 of my original report.

Q. Apologies, what paragraph did you say you're referencing?

A. 163 in the initial corrected report.

Q. But what was original one that you were saying, was it in your reply report?

A. In the rebuttal report, yes, in paragraph 409 A I reference a fact that there is a lots economic inference but confirmed by the fact there is testimony from these third-party repair companies that the challenge restraints delayed their entry. And in support of that I note that May from Restore said that the restraints were delaying the their growing of their business and particularly develop the Xi.

And in paragraph 163 I note other evidence to that same affect that they were planning to offer the full range of S/Si and X/Xi instruments if they didn't have these restraints.

And then in paragraph 409 E I note that they became interested really when they heard about this possibility from Robotix, but obviously if Robotix and Stryker had entered earlier they would have heard about this earlier that is just likely they would have entered earlier.

Q. You understand to Restore didn't exist as a company until 2018?

MR. SNYDER: Objection to the form.

A. I don't know in this particular incarnation or name, but there was a predecessor business as I recall.

Q. What about SIS, what evidence are you relying on for the notion that SIS would have entered in May of 2017?

A. In addition to just economics incentives that are rational, they did testify that although they learned about it from

Robotix if they would have been interested in entering in 2016 if they just heard about the opportunity then. So there been entry SIS would have been interested and would have heard about it and then they would have been interested in entering earlier.

Q. So you're evidence is that SIS would have entered in May of 2017 is that they would have been interested in doing so earlier if they had heard about it earlier?

A. Yes. And also that they themselves estimated that they could make 250 to 350 million a year from entering. So they would have had plenty of opportunity to do so. Plenty of incentive I should say to do so.

Q. Are you offering the opinion that SIS would entered as distributor or selling its own services?

A. I'm offering a particular opinion about which way they could have done so. As I said several times, I'm just saying that one reasonable scenario is that there would have been entry in May, 2017 by one or more of these

firms or could be other firms as well. And I'm

leaving that up to the factfinder, but I think there is at least enough evidence from this to think it is reasonable to supposed that it would have happened and thus make it reasonable to calculate damages that would ensue if the factfinder believes or concludes that entry would have occurred by May of 2017.

Q. SIS didn't hear about Robotix's EndoWrist business until 2019; is that correct?

A. I'm not exactly sure. It could 2018, 2019. I'm not positive about the year.

Q. When we were talking about Stryker a second ago, do you recall reviewing testimony from Stryker in this case regarding its reasons for not going forward with the deal with Robotix?

A. I recall testimony, I can't remember whether it was from Stryker or somebody else about why Stryker didn't go ahead with the deal.

Q. Do you recall that there was testimony from Stryker that Stryker's quality system and regulatory count two not let Stryker

were feasible. Hospitals had concluded as well that use limits could be raised without compromising functionality. And so therefore 20 seemed a conservative low estimate.

And there was also evidence that the actual use limits were arbitrary that were being imposed. That they with weren't really connected to where wear or tear, although not mentioned here, I think I talk about it elsewhere in my report, that Dr. Parnell's opinion points out that the use limits didn't make much sense in terms of wear or tear because the use limit applied whether or not something was torn and even if it was torn you would be within use limit, but also in terms of just wear, if you really want to measure the amount of time that the device was used. And they could have done that and in fact they are tracking the time of usage but that is not what the limit is based upon.

So are all reasons why one would think that you would use it more than the actual use limits and that given this evidence

summarized in paragraph 450 at least 20 seems conservatively possible.

Q. You're not an expert on the safety of EndoWrist, are you?

A. I am not a safety expert, no. I'm

relying on the views here of market participants and independent industry analysts.

Q. Are you asserting an opinion in this case that Intuitive should have gone about addressing the safety of the EndoWrist in a different way?

A. I think there is evidence to indicate that the use limit was not safety, just the ones it shows were not safety justified in fact the he deliberately could the did the not test higher because the use limits were set by the marketing department of Intuitive and this they could have, they acknowledged they could have tested more instruments, they could have tested them further, they could have extended it from these 13 Xi's or to all the Xi's to S and Si's and they could have done all of this earlier as well, but they chose not to do so. The only

thing they did test, they found that in fact they could raise the use limit.

So I think it is reasonable to assume had they tested more and earlier, they would have concluded that they could raise the

use limit on more devices and raised them earlier.

Q. So going back to your opinion that use limits might not exist in the but for world, are you opining that Intuitive should have just allowed surgeons to make the decision as to when to stop using an EndoWrist?

A. I'm not offering an opinion about what they normatively should do. I'm saying that one of the challenges in this case is to the use limits themselves. So if the factfinder agrees with that challenge that the use limits did not have an procompetitive justification to offset the anticompetitive effect and that they were unlawful as a result, then by definition the but for world does not include unlawful activity. So there would be no use limits in the but for world and in that

is?

A. Do I recall what it is?

Q. Yes.

A. It's a document that says paragraph 360 to 361 of my original report. I can't remember the Bates number.

Q. In what context was that statement made?

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A. I don't recallment document is cited in footnote 863 of my initial report.

Q. Do you recall reviewing any testimony in the case regarding the document that you cited?

A. I do not recall, no.

MS. BASS: I think we are up to exhibit 295. Is that right.

MR. SNYDER: It sounds the right.

MS. BASS: I could like to introduce tab 125 as Exhibit 295.

(^ Exname ^ Exhibit for identification, .)

MS. BASS: For the record Exhibit 2945 IS a document Bates numbered Intuitive-01190868.

Q. Professor Elhauge, this is a document that you're citing when you say that Intuitive did an internal analysis indicating that it could safely -- sorry let me reread the sentence to make sure I get it right.

"Intuitive's analysis even contemplated use limits of 40 to 100."

A. I'm just getting the document.

Exhibit 295. Yes.

Q. So what is this document?

A. It's a document about strategic pricing and what challenges they face and how what questions they need to answer in order to figure out how to set their strategic pricing.

Q. Do you know who authored the document?

A. I don't know.

Q. As I mention earlier do you recall if you read any testimony in the case about the document?

A. I don't recall.

Q. So you're referencing the line here where it says "EU I of 40 to 100 lives

would require a chain in how we sell/manage instruments." Is that right?

A. That and further down under the details questions question 2 they say "how we would incorporate consignment of the instruments into AMP if EUI have 40 to 100 lives."

Q. So is this, you think this is evidence that Intuitive believed that it could

extend the lives of its products to 40 to 100?

A. I said they are thinking that that's a possibility. My conservative assumption is at least 20. But I think if in your internal analysis you take them seriously the possibility of that use could be extended to 40 to 100, that does support the assumption that is it quite conservative they could increase it to at least 20.

Q. But you have no idea what context what this document was created in, correct?

A. I think on its own it pretty clearly indicates that it is a strategic pricing document and they're thinking about the impact of more uss on the product.

So, I think that's enough to make it useful for the conclusion that I'm trying drawing from it.

Q. Is do you know if the person who drafted a document called strategic pricing had any input from Intuitive's regulatory or technical staff as to whether such lives would even be possible?

A. I don't know they asked those

people or not.

Q. We talked about Deutsche Bank earlier, do you consider Deutsche Bank to be a authoritative source as to how many uses would be feasible of an EndoWrist?

A. I think they are, as I said before, a good pragmatic independent analyst. They are just trying to make judgements where investments should be made based upon what they think is possible. So they would investigate the issue and they could be a good neutral assessor of what from a business perspective people would have thought was possible at the time.

Q. Do you know if the information in the Deutsche Bank report would have come from the third-parties?

A. The information -- whether that -- where they got it from?

Q. Let me back up I will ask a more precise question. You say "Other sources like Robotix and Deutsche Bank have indicated that 29 to 59 uses was feasible." I'm asking you if you know where the 29 to 59 uses in the

Deutsche Bank report would have come from?

A. 29 to 59 I thought was the Robotix figure.

Q. I'm quoting from are paragraph 450 B. In your rebuttal report.

A. 450 B.

Q. Your rebuttal report paragraph 450 subsection B as in boy.

A. Yes, but other source look Robotix and Deutsche Bank indicate this whole range being if you actually look at paragraph 301 in the same report it separates them out rather than putting them together and I point out that Robotix found 59 uses was feasible where as

Deutsche Bank found that 39 to 48 uses were feasible. When I put them together I say 29 to 59 because Deutsche Bank range is within the Robotix range. But Deutsche Bank actually found a more narrow of 39 to 48 uses was feasible.

Q. A.m. asking you do you have a understand where that information would have come from from Deutsche Bank?

A. I don't know where they got the

information from.

Q. I think we covered this earlier but just to confirm. You're not offering any sort of opinions in this case about the safety and reliability of medical devices, correct?

A. Well the opinions I'm offering are limited I think to what the market perception was about whether these repaired devices were safe and whether the use limits were necessary. So market perception and to the extent that the defense economics expert is getting into the issue by claiming that the evidence shows one thing, I do point out there is lot of evidence

that the defense expert is ignoring on the topic.

I don't resolve the issue, but I am offering the critique that if the economic experts are going to be resolving safety issues that the defense expert has ignored a lot of evidence on the safety issue. But with those exceptions otherwise, I leave it up to the factfinder to conclude whether or not they were safe or not.

Q. You've never designed a safety

program for a medical device, correct?

A. Correct.

Q. Did you review the testing materials for Intuitive's S/Si instruments?

A. The safety materials, what do you mean by that?

Q. The safety testing materials, all the testing that Intuitive did to ensure the safety of S/Si instruments?

A. I looked at some of the safety, I don't know whether he saw all the safety testing information. But I look at some of it to extent that it is cited in my report.

the but for rival shares in part influenced by the price that Intuitive would pick. And so I'm just conservatively concluding, well, there would have been at least a 20 percent price cut based on Intuitive's own assessment of the rival competitive threat.

Q. Assume in the but for world that the demand for reset EndoWrist in these third-party was only equivalent to $2 million, there is no more from from hospitals no no more doing it beyond the 2 million dollars. Are you offering the opinion that Intuitive still would have cut its prices to EndoWrist by 20 percent across the but for world?

A. I don't know I don't have any evidence to support that assumes. But again I don't think you can except from the time out from what their price would have been of the it seems to me that the evidence indicates not

only there was a lot more interest in the rival product, but Intuitive must have thought there was more interest in the product because they themselves planned to respond to it with a 20

percent price cut.

Q. I want you to assume for me in the but for world there is very limited interest from hospitals in using EndoWrist from the third-parties. Again, the maximum amount that would be purchased from the third-parties is $2 million. Every knows it including Intuitive?

A. So it is capped for some reason?

Q. Yes. If that were the case and the third-parties only garnered that limited amount of sales, do you believe that Intuitive would have lowered its price a cross the but for world by 20 percent?

MR. SNYDER: Objection.

A. I think hypothetical is inconsistent at the time with all the facts in the case including Intuitive's own analysis if you're going to high policies there is some sort of cap what rivals can sell, then

Intuitive would not incentive to lower the price by 20 percent.

A. If the cap is no more than $2 million in sales in the market.

Q. You mentioned this earlier, I think you're using the Project Dragon document as a basis for your asserted 20 percent price discount; is that right?

A. Yes.

Q. Just so to make sure that I have your assumptions correct, you're assuming in the but for world that you're 20 periods of time price reduction would apply to both Si and Xi instruments; is that right?

A. Well I have alternative scenarios. So I present both to the factfinder. I think it is between I think they would have lowered them across both.

Q. So the for Project Dragon the 20 percent number that you point to do you have a understanding of whether the discount would have applied for example like a in all geographic territories, was it worldwide, what was Intuitive contemplating?

A. They have a very firm what they wall a one tries strategy, they over offer one price through the United States for EndoWrist

they could have offered the same pry throughout United States.

Q. Foreman Project Dragon were they considering implementing it in foreign countries, in the U.S., what was geographic reasonable of Project Dragon?

A. I think were contemplating doing in both U.S. and Europe if I recall correctly at least within the United States.

Q. Is the 20 percent number that you're pointing to, is it your understanding that that that would have been a worldwide discount across the but for world?

A. I think it would have at least been the U.S. discount. I'm not sure whether they charged the same price in foreign countries or not.

Q. Did you see any document indicates that Intuitive was not contemplating a 20 percent price reduction in the U.S.?

A. No.

Q. So if you could look at your opening report at 394, please.

A. Okay.

Q. So about halfway down in that paragraph you say "Indeed in May, 2017 when Intuitive considered competitive responses to the expected entry of rivalry repaired EndoWrists in the actual world even with the advantages of it's restraints, Intuitive internally proposed offering repaired EndoWrists at a discount of 25 to 40 percent off the actual price it offered new EndoWrists." Do you see that?

A. Yes.

Q. So that is in May of of 2017, correct?

A. Yes.

Q. If you look a little bit further over on paragraph 396 here you say in response to expected rival repair competition, Intuitive made another proposal to offer even with a challenged restate goes a mix knew and repaired EndoWrists at a 20 percent discount from its price of new EndoWrists." Do you see that?

A. Yes.

Q. Then you cite to the footnote 946 where you cite Scoville Exhibit 1. Is that

right?

A. Yes as well as there is another document.

Q. Yes. So we have already introduced Scoville Exhibit 1 today as Exhibit 293. So could you take a look at that. Do you have that one up?

A. Yes.

Q. So you can see from the front of this it says Instrument Refurbishing Project Dragon July 12th, 2017; correct?

A. I don't see the date, where do you see the day.

Q. Are you on Exhibit 293?

A. Yes. The first page being okay, yes, okay it says July 12th, 2017.

Q. So, you will recall that the first document that you mentioned was the 25 to 40 percent number was in May of 2017, correct?

A. Yes.

Q. Now, we move forward a few months to July of 2017; correct?

A. Yes.

Q. Is it your understanding I think I

said that earlier that the 20 percent discount that you're contemplating would have been provided kind of across the but for world to all customers?

A. Yes.

Q. I think you cited to page 185 of the document, Bates number 185?

A. That is one of the pages, yes.

Q. Let's go to that page of the in the note here it says 20 percent discount is proposed, do you see that?

A. Yes.

Q. Turn to the next page the title here is a niche boutique refurbishing program. Did you take this title into account when considering that the discount that you think would have been offered through medical device would apply for all customers?

A. I took a the whole document into accountment I don't think this indicates I wouldn't have applied it to any hospital that wanted to buy under it.

Q. So what was your understanding of

what miss Scoville meant in this document when she said that it was a niche boutique refurbishing program?

A. I'm not what those phrases mean in this context.

Q. But you assumed that the refurbished instruments would have been available under the program to all purchases at a discount being correct?

A. I thought compared to the 25, 40 percent did he say you count this was a more conservative one to use so I used this one.

Q. You said you took the whole document into account in reaching your conclusions; correct?

A. Yes.

Q. Can you turn to document with the Bates number ending in the same document, 201, please.

A. Okay.

Q. So this slides regional marketing and sales strategies, do you see that?

A. Yes.

Q. You see there is columns for

Germany, France, and the U.S., do you see that?

A. I have to expand it so I can see it.

MR. SNYDER: It is very small on mine.

A. Okay, yes, Germany, France and U.S.

Q. You see there is a row on the left that says discount. Do you see that?

A. Yes.

Q. You see it says Germany 20 percent, correct?

A. Yes.

Q. And you see it says France 20 percent, correct?

A. Yes.

Q. Under U.S. it does not say 20 percent, does it?

A. No it doesn't say 20 percent, no.

Q. It says enterprise solutions will vary, correct?

A. Yes.

Q. It says at the time the top here

measure to me.

Q. You understand that this document is later in time than the document that you just referenced, correct?

A. Yes.

Q. You understand that the document does not use 20 percent, correct?

A. It does use --

Q. -- for the U.S.

A. It doesn't say it in this particular page that it would be 20 percent. But the thrust of it that's what the overall economic impact is. And I think other parts of the page suggest that I think it is same economic impact. Just on this particular page they are talking about potential user, there are back up slides potentially having a different strategy in the U.S. on the specifics. I don't think that alters the overall thrust of what sort of discount they thought would be appropriate at that time.

Q. They could have put 20 percent here, correct?

A. They could have, yes.

Q. And they did not, correct?

A. On that page, they did not. Under the U.S. column.

Q. Do you understand what it means when it says enterprise solutions?

A. I think it means the agreements with different enterprises could vary.

Q. So that means they this weren't contemplate on applying any price across the but for world in the U.S., correct?

MR. SNYDER: Fox.

A. Well, you mean the options here the first one says it is going to be -- they may have a different solution of the flat procedure pricing they may charge per use per procedure rather than charge per EndoWrist and cap the usage.

Q. That is under the volume requirements row, correct?

A. It is all one merged box it seems to me, they merged what was divided up as a volume of premise discounts in the Germany and France in this proposal, the U.S. they just combined it all together. They said instead of

using two different points of how to get there?

A. Well, in terms of the but for price affect I'm relying on Abbott benchmark. And Abbott as I point out has a mix of contestable and incontestable, so that is another reason why I would apply across the but for world.

If we are just talking about, this

goes to the issue of with services do you apply the discount to. So I have two different theories for saying the discount applies to all -- I guess it's three theories, it applies to all the services. One is that the benchmark itself an Abbott benchmark that has contestable and incontestable sales. The other possibilities that even with the Abbott discount only applies to contestable sales. There is a charge for the same service fee for both contestable and incontestable so it would apply across the but for world. And then finally there is a rationale by which the factfinder might conclude that the fact that the technological tie was illegal and therefore all the sales

would have been contestable in the but for world.

Q. For Abbott you said it had a mix of contestable and incontestable services is that right?

A. Yes.

Q. What is the incontestable service for Abbott?

A. I don't know if it's broken down

what exactly the incontestable services are, but I think I point out there is evidence that for every OEM there are certain things they could do that rivals cannot do. Let me see if he can find exactly where I say that.

I point out that Abbott has a mix of contestable and incontestable servicing in paragraph 464 of my rebuttal report. Unfortunately I didn't include the citation to where I said that in my initial report.

Q. You doesn't recall what the incontestable services that Abbott can provide?

A. No.

Q. You said it is not unusual that OEM goes are provide service that third-party

Rye party entities cannot, correct?

Q. Did you examine the record with respect to how Restore performed with the one customer where it did perform service?

A. I'm not sure it's true there is only one customer, so I don't want to agree to that. But I did look at evidence on the quality of service that they provided.

Q. What was conclusion?

A. That there no evidence to indicate it was not as good a quality of service within the scope of what they were able to do with without the proprietary software.

Q. Let's take a look at tab 75. Which we will mark as the next exhibit.

(^ Exname ^ Exhibit for identification, .)

Q. I believe it is 296?

MR. SNYDER: That's what I have.

MS. BASS: For the record this is Intuitive-00008958 and we're marking this as Defendants' Exhibit 286.

Q. Feel free to take the time to

rival competition, whether it is safe or not. Where as the hospital incentives are only to not use rivals if they are unsafe.

Q. Let me kind of go back to one of questions that I asked earlier just to make sure that I understand it.

Did you examine the record to understand how Restore performed at Baylor Scott & White. We know they would performed service for Baylor Scott & White, so did you look at the record how things went with that entity?

A. I had my staff look at that and I

think the best evidence that we ended up having on that was evidence provided by Dr. Parnell.

Q. Again, let's set aside the technological tie claim. Assume the jury don't believe it. You're still offering the opinion that in the but for world that -- let me take a step back.

Assuming no technological tie, there is only a limited amount of service that a third-party entity can performed in the but

for world, correct?

A. Yes.

Q. But you're assuming that the fact that the third-party entities could potentially perform service in the but for world would have a price affect across what you call incontestable and contestable service, correct?

A. Either there is two vehicles to get to that. One is that it is going to lower contestable sales and the incontestable sales will have the is same price affect because they price the same across them, Intuitive does.

The other is that really the 14 percent comes from Abbott. And Abbott as an

OEM also has a mixture of contestable and incontestable sales. So that the 14 percent already takes into account the fact that rivals are only able to constrain contestable sales if you think they're price definitely. So that either way you get to the same conclusion that 14 percent is a good conservative estimate of the price affect.

Q. What is the size of Abbott compared to Intuitive?

A. The exact size I don't know. But I do conclude and Dr. Smith does not dispute that Abbott the medical device OEM and the firm most similar to Intuitive in terms of size in in medical equipment repair and maintenance service industry. So their size may be different but they are the most similar in the same category to Intuitive.

Q. In what areas does Abbott provide service?

A. In the medical equipment area. Variety of medical equipment.

Q. What type of medical equipment did they provide service?

A. They have, let's see, I'd have to check to confirm. At least according to Dr. Smith they have devices for the treatment of cardiovascular disease, diabetes and advancement of chronic pain and movement disorders.

Q. What was last one?

A. Movement disorders. These are I guess neuromodulation devices that help manage

pain and I guess it must be spasms is my inference.

Q. What service does Abbott form in each of those four categories?

A. I don't know the technical details of what kind of service they are providing in terms of repairing or maintaining those devices.

Q. How many service technicians does Abbott have?

A. I don't know.

Q. Do you know how many hospitals Abbott services?

A. I don't offhand number number of hospitals they service.

Q. We talked about this a earlier, you said you have a statement that Abbott performs contestable and incontestable demand. Do you recall examining the question of whether incontestable services Abbott provides?

MR. SNYDER: Objection.

A. There is some support for the overall population, but what the specific services are, I don't recall anything on that.

the hypothetical of the service he that only Intuitive could do in the but for world, correct?

A. In your hypothetical, yes.

Q. So under the hypothetical where there is certain services in the but for world that only Intuitive can perform, you're offering the opinion that Intuitive would drop its prices on those services; is that right?

A. Yes. To observe the uniformity of pricing for service.

Q. In the but for world you think that Intuitive would preserve the uniformity of pricing preserve?

A. It would do it in but for world as well.

Q. And your basis for that is because

in the actual world, assuming that there is a very small amount of services done on time and material basis, Intuitive charges the same hourly rate for those services it can perform and services that others can perform, is that the basis?

A. Yes, they have this one rate

policy.

Q. You think that Intuitive would maintain that policy in the but for world?

A. Yes I think whatever the rationale for having that policy would continue to apply. So I think and settle any evidence to the contrary this he would maintain in in the but for world.

Q. Do you model how many customers would be willing to use third-party service in the but for world?

A. I don't have a particular percentage that would use it I'm relying on price affect on Intuitive's own pricing.

Q. So have you then considered the issue of technicians, right, so have you considered how the third-parties would agree to

some sort of a sufficient scale in the but for world?

A. Like any company you have to grow by hiring or training employees.

Q. So is it your assumption that the third-parties would keep hiring people from

section is my recollection. But that I -- in terms of output.

MS. BASS: Let's being off the record.

THE VIDEOGRAPHER: The time is now 6:44 going off the record off the video record.

(Recess taken)

THE VIDEOGRAPHER: The time is now 7:05 back on the video record.

BY MS. BASS:

Q. Professor Elhauge, I think we talked about earlier today that you haven't modeled was would be thought as kind of a foreclosure percentage in this case; is that right?

A. No, the foreclosure percentage is 100 percent, I calculate that.

Q. Have you it calculated which of the hospitals you think would have purchased from the third-parties in the but for world?

A. I miss that question.

Q. Have you calculated what percentage of hospitals you think would have

purchased from the third-parties in the but for world?

A. That is the but for market share, that not the foreclosure share. The foreclosure share is a 100 percent and proper economic methodology does not subtract from the foreclosure share hospitals that would have purchased from Intuitive in the but for world. So it applies whether or not the hospital would have bought from arrival in the but for world.

Q. It is based off of your view that even if a hospital would haven't ever purchased from one of the third-parties, that the hospital still foreclosed; correct?

A. Yes, it still foreclosed because its choice was foreclose and still leads to adverse price affects that that hospital suffers.

Q. Can choice be foreclosed for something that there is no demand for?

A. Well if there is no demand by anybody -- I mean -- the rationale for treating foreclose is actually the best way to test that is not to speculative arguments about what they

would have done, but allowing a free market to have them choose whether or not to go with the rival.

But the threshold test that I do apply is that some buyers want to purchase the products un/PWURD. There is some demand at least for it.

Q. You haven't attempted to measure what the system demand would be, correct?

A. There is some demand for the rival product, so the choses are being restrained at are in all the hospitals. They are not free to choose it and at lead to a price affect that applies to all hospitals whether or not they would bought from Intuitive in the but for world.

Q. You haven't made a attempt to quantify what you mean by some hospitals that would have purchased from the third-parties in the but for world, correct?

A. No, I show there is a range of projections. They all indicate substance sales would be made by rivals. But what the precise percentage does not matter for my analysis

because it is based upon a price affect, a conservative measure of the price affect which is the price affect even if the hospital continued to purchase from Intuitive.

Q. When you say estimate, those are the one that we already covered today based off Intuitive's own internal programs and the one from Deutsche Bank and the one from Stryker; correct?

A. In terms of the but for share, in in terms of price affect it is the Intuitive Project Dragon estimates.

Q. But you use the word substantial I think in your prior answer regarding what you think the third-parties would have been able to garner in terms of share and I want to make sure that I understand what you're referring to when you said they are substantial estimates and I wanted to make sure that's the --

A. There is progressions that indicate some substantial sharing would go to rivals including by Stryker, by Intuitive and I think you're right there was a industry analyst maybe it was Deutsche Bank. There is also the

going to have a safety affect, it's not going to have the anticompetitive affect it's just not going to have not affect.

So to bother use the contracts and the restraints and spend a lot of effort enforcing them they have to think the restraints were altering hospital choices.

Q. Have you calculated a but for market share for the third-parties?

A. No, as I say in the report I haven't calculated a precise but for market share. It's enough it seems from all the projections it would be substantial.

Q. Those are the projections that we were just discussing?

A. Yes apartment other evidence that indicate that a significant number of hospitals would choose to buy from rivals at a lower price.

Q. Whatever that evidence is would be cited in your reports?

A. Yes.

Q. So you indicated earlier in one of your responses that, I think you think of this